Complete Summary

GUIDELINE TITLE

Long-term consequences of polycystic ovary syndrome.

BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). Long-term consequences of polycystic ovary syndrome. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2003 May. 8 p. (Guideline; no. 33). [38 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Polycystic ovary syndrome and associated metabolic disturbances such as type II diabetes mellitus, dyslipidemia, and atherosclerotic conditions

GUIDELINE CATEGORY

Management
Prevention
Screening
Treatment

CLINICAL SPECIALTY

Endocrinology
Family Practice
Internal Medicine
Obstetrics and Gynecology

INTENDED USERS

Advanced Practice Nurses
Nurses
Physicians

GUIDELINE OBJECTIVE(S)

To provide information, based on clinical evidence, to assist clinicians who manage patients with polycystic ovary syndrome in advising them about the long-term health consequences of the syndrome

TARGET POPULATION

Women with polycystic ovary syndrome

INTERVENTIONS AND PRACTICES CONSIDERED

Assessment

1. Laboratory tests
    - Fasting blood glucose
    - Urinalysis (for glycosuria)
    - Glucose tolerance test
    - Fasting cholesterol, lipids and triglycerides
2. Regular assessment for later development of diabetes and dyslipidemia
3. Patient counselling related to weight and exercise
4. Screening for gestational diabetes (in pregnant women)

Treatment

1. Progestogens to induce withdrawal bleeds (for oligo- or amenorrhoea)
2. Insulin-sensitising agents (short term)

MAJOR OUTCOMES CONSIDERED

- Risk of developing type II diabetes and cardiovascular disease
- Risk of developing gestational diabetes
- Risk of developing endometrial hyperplasia and carcinoma

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Original articles considered when writing this guideline were obtained following a computer search using "polycystic ovary" as a key phrase, and also in combination with "metabolic," "diabetes," "cardiovascular," and "glitazone" applied to

i. Medline (PubMed) 1966-June 2002
ii. Embase 1980-June 2002

The computer search was complemented by hand searching from original references and reviews.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Ia: Evidence obtained from meta-analysis of randomised controlled trials

Ib: Evidence obtained from at least one randomised controlled trial

IIa: Evidence obtained from at least one well-designed controlled study without randomisation

IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study

III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The recommendations were graded according to the level of evidence upon which they were based. The grading scheme used was based on a scheme formulated by the Clinical Outcomes Group of the National Health Service (NHS) Executive.

Grade A - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence levels Ia, Ib)

Grade B - Requires the availability of well-conducted clinical studies but no randomised clinical trials on the topic of recommendations (evidence levels IIa, IIb, III)

Grade C - Requires evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (evidence level IV)

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Following discussion in the Guidelines and Audit Committee, each green-top guideline is formally peer reviewed. At the same time the draft guideline is published on the Royal College of Obstetricians and Gynaecologists (RCOG) website for further peer discussion before final publication.

The names of author(s) and nominated peer reviewers are included in the original guideline document.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

In addition to these evidence-based recommendations, the guideline development group also identifies points of best clinical practice in the original guideline document.

Levels of evidence (Ia-IV) and grading of recommendations (A-C) are defined at the end of the "Major Recommendations" field.

Diagnosis of Polycystic Ovary Syndrome (PCOS)

C - Young women diagnosed with PCOS should be informed of the possible long-term risks to health that are associated with their condition. They should be advised regarding weight and exercise. [Evidence level III]

Metabolic Consequences of PCOS

PCOS and Risk of Type II Diabetes

C - Patients presenting with PCOS, particularly if they are obese, should be offered measurement of fasting blood glucose and urinalysis for glycosuria. Abnormal results should be investigated by a glucose tolerance test. Such patients are at increased risk of developing type II diabetes. [Evidence level IIb]

PCOS and Cardiovascular Risk

C - Measurement of fasting cholesterol, lipids, and triglycerides should be offered to patients with PCOS, since early detection of abnormal levels might encourage improvement in diet and exercise. [Evidence level III]

PCOS and Pregnancy

B - Women who have been diagnosed as having PCOS before pregnancy (e.g., those requiring ovulation induction for conception) should be screened for gestational diabetes in early pregnancy, with referral to a specialised obstetric diabetic service if abnormalities are detected. [Evidence level IIb]

PCOS and Cancer

B - Oligo- and amenorrhoeic women with PCOS may develop endometrial hyperplasia and later carcinoma. It is good practice to recommend treatment with progestogens to induce a withdrawal bleed at least every three to four months. [Evidence level IIa]

Strategies for Reduction of Risk

Exercise and Weight Control

The impact of exercise and reduction in body mass by hypocaloric dieting on ovarian function in PCOS is well characterized. Adoption of simple methods for reduction of body fat and improvement in physical fitness will result in resumption of ovulation and increase in fertility in a high proportion of obese PCOS women.

Drug Therapy

B - Insulin-sensitising agents have not been licensed in the United Kingdom (UK) for use in nondiabetic patients. Nevertheless, a body of evidence has accumulated demonstrating both their safety and, in some studies, efficacy in the management of short-term complications of PCOS, particularly anovulation. Long-term use of insulin-sensitising agents for avoidance of metabolic complications of PCOS cannot as yet be recommended. [Evidence level IV]

Screening Young PCOS Patients for Long-Term Health Risk

C - No clear consensus has yet emerged concerning regular screening of women with PCOS for later development of diabetes and dyslipidemia, (Ehrmann et al. 1999; Kelly et al., 2000) but obese women with a strong family history of cardiac disease or diabetes should be assessed regularly in a general practice or hospital outpatient setting. Local protocols should be developed and adapted as new evidence emerges. [Evidence level IV]

Definitions:

Grading of Recommendations

Grade A - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence levels Ia, Ib)

Grade B - Requires the availability of well-conducted clinical studies but no randomised clinical trials on the topic of recommendations (evidence levels IIa, IIb, III)

Grade C - Requires evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (evidence level IV)

Levels of Evidence

Ia: Evidence obtained from meta-analysis of randomised controlled trials

Ib: Evidence obtained from at least one randomised controlled trial

IIa: Evidence obtained from at least one well-designed controlled study without randomisation

IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study

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IV: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for selected recommendation (see "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate management of polycystic ovary syndrome and prevention of the associated long-term health consequences

POTENTIAL HARMS

None stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Clinical guidelines are "systematically developed statements which assist clinicians and patients in making decisions about appropriate treatment for specific conditions." Each guideline is systematically developed using a standardised methodology. Exact details of this process can be found in Clinical Governance Advice No. 1: Guidance for the Development of Royal College of Obstetricians & Gynaecologists (RCOG) Green-top Guidelines.
- These recommendations are not intended to dictate an exclusive course of management or treatment. They must be evaluated with reference to individual patient needs, resources and limitations unique to the institution and variations in local populations. It is hoped that this process of local ownership will help to incorporate these guidelines into routine practice. Attention is drawn to areas of clinical uncertainty where further research may be indicated.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Patient Resources

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). Long-term consequences of polycystic ovary syndrome. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2003 May. 8 p. (Guideline; no. 33). [38 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 May

GUIDELINE DEVELOPER(S)

Royal College of Obstetricians and Gynaecologists - Medical Specialty Society

SOURCE(S) OF FUNDING

Royal College of Obstetricians and Gynaecologists

GUIDELINE COMMITTEE

Guidelines and Audit Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee Members: Professor Deirdre J Murphy, MRCOG (Chair); Lizzy Dijeh (Secretary); Ms Toni Belfield, Consumers' Representative; Professor P R Braude, FRCOG, Chairman, Scientific Advisory Committee; Mrs C Dhillon, Head of Clinical Governance and Standards Dept.; Dr Martin Dougherty, A. Director NCC-WCH; Miss L M M Duley, FRCOG, Chairman, Patient Information Subgroup; Mr Alan S Evans, FRCOG; Dr Mehmet R Gazvani, MRCOG; Dr Rhona G Hughes, FRCOG; Mr Anthony J Kelly MRCOG; Dr Gwyneth Lewis, FRCOG, Department of Health; Dr Mary A C Macintosh, MRCOG, CEMACH; Dr Tahir A Mahmood, FRCOG; Mrs Caroline E Overton, MRCOG, Reproductive medicine; Dr David Parkin, FRCOG; Oncology; Ms Wendy Riches, NICE; Mr Mark C Slack, MRCOG, Urogynaecology; Mr Stephen A Walkinshaw, FRCOG, Maternal and Fetal Medicine; Dr Eleni Mavrides, Trainees Representative

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Guideline authors are required to complete a "declaration of interests" form.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Print copies: Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Bookshop, 27 Sussex Place, Regent's Park, London NW1 4RG; Telephone: +44 020 7772 6276; Fax, +44 020 7772 5991; e-mail: bookshop@rcog.org.uk. A listing and order form are available from the RCOG Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guidance for the development of RCOG green-top guidelines. Clinical Governance Advice No 1. 2000 Jan. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.
- Searching for evidence. Clinical Governance Advice No 3. 2001 Oct. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

PATIENT RESOURCES

The following is available:

- Polycystic ovary syndrome: what it means for your long-term health. Royal College of Obstetricians and Gynaecologists, 2005 Feb. 6 p. Electronic copies: Available from the Royal College of Obstetricians and Gynaecologists Web site.

Print copies: Available from the National Health Service (NHS) Response Line 0870 1555 455, ref: 23809. 11 Strand, London, WC2N 5HR.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

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